

Claims

What is claimed is:

1. A computer-based method of automatically controlling an inventory of items, the method comprising the steps of:

5 automatically collecting information relating to a status associated with at least one inventory item; and

 automatically accessing at least one electronic marketplace in order to determine one or more optimal parameters, based on the collected status information, to be used for replenishing the at least one inventory item via the at least one electronic marketplace.

10 2. The method of claim 1, wherein the electronic marketplace accessing step further comprises monitoring at least one of pricing and supply trends associated with the at least one electronic marketplace on the at least one inventory item.

15 3. The method of claim 1, wherein the one or more optimal parameters comprise an optimal time to acquire the at least one inventory item via the at least one electronic marketplace.

 4. The method of claim 1, wherein the one or more optimal parameters comprise an optimal quantity of the at least one inventory item to acquire via the at least one electronic marketplace.

20 5. The method of claim 1, further comprising the step of one of aggregating and deaggregating the collected information in order to determine the one or more optimal parameters.

 6. The method of claim 1, further comprising the step of automatically placing an order for the at least one item on the at least one electronic marketplace.

7. The method of claim 1, further comprising the step of automatically generating an alert to an individual that an order may need to be placed for the at least one item.

5 8. The method of claim 1, wherein the step of automatically collecting information further comprises collecting usage pattern information associated with the at least one item.

9. The method of claim 1, wherein the step of accessing the at least one electronic marketplace further comprises gathering information on a market condition associated with the at least one inventory item.

10 10. The method of claim 1, further comprising the step of automatically generating a recommendation of at least one of a different brand and a different type of an item to a consumer of the inventory.

11. A computer-based method of performing machine-to-machine inventory control, the method comprising the steps of:

15 receiving, in accordance with a first machine, a data signal generated by a sensor system indicative of a status of an inventory of items being monitored by the sensor system; and

procuring, in accordance with a second machine via at least one electronic marketplace, additional such items for an end consumer based on the data signal and depending on one or more optimal market conditions associated with the items.

20 12. The method of claim 11, wherein the data signal generated by the sensor system is passed through from the sensor system to the first machine via at least a third machine serving as a gateway.

13. The method of claim 11, wherein the sensor system is embedded.

14. The method of claim 11, wherein the data signal further comprises information about a history of inventory of such items.

5 15. Apparatus for automatically controlling an inventory of items, the apparatus comprising:

at least one processor operative to: (i) receive automatically collected information relating to a status associated with at least one inventory item; and (ii) automatically access at least one electronic marketplace in order to determine one or more optimal parameters, based on the collected status information, to be used for replenishing the at least one inventory item via the at least one electronic marketplace; and
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memory, coupled to the at least one processor, for storing at least the collected status information.

16. The apparatus of claim 15, wherein the electronic marketplace accessing operation further comprises monitoring at least one of pricing and supply trends associated with the at least one electronic marketplace on the at least one inventory item.
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17. The apparatus of claim 15, wherein the one or more optimal parameters comprise an optimal time to acquire the at least one inventory item via the at least one electronic marketplace.

18. The apparatus of claim 15, wherein the one or more optimal parameters comprise an optimal quantity of the at least one inventory item to acquire via the at least one electronic marketplace.
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19. The apparatus of claim 15, wherein the at least one processor is further operative to one of aggregate and deaggregate the collected information in order to determine the one or more optimal parameters.

5 20. The apparatus of claim 15, wherein the at least one processor is further operative to automatically place an order for the at least one item on the at least one electronic marketplace.

21. The apparatus of claim 15, wherein the at least one processor is further operative to automatically generate an alert to an individual that an order may need to be placed for the at least one item.

10 22. The apparatus of claim 15, wherein the at least one processor is further operative to automatically collect usage pattern information associated with the at least one item.

15 23. The apparatus of claim 15, wherein the at least one processor is further operative to gather information on a market condition associated with the at least one inventory item.

24. The apparatus of claim 15, wherein the at least one processor is further operative to automatically generate a recommendation of at least one of a different brand and a different type of an item to a consumer of the inventory.

20 25. A system for automatically controlling an inventory of items, the system comprising:

at least one sensor operative to automatically obtain information relating to a status associated with at least one inventory item; and

at least one computer system, operatively coupled to the at least one sensor, operative to receive the status information and to automatically access at least one electronic marketplace in order to determine one or more optimal parameters, based on the collected status information, to be used for replenishing the at least one inventory item in accordance with at least one provider of the item via the at least one electronic marketplace.

26. The system of claim 25, further comprising at least another computer system, operatively coupled between the at least one sensor and the first computer system, operative to serve as a gateway.